

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously presented): A semiconductor light-emitting device, comprising:

a lead frame having a main surface in which a first region and a second region extending along a periphery of said first region are defined;

a semiconductor light-emitting element provided at said first region;

a first resin member having a first reflectivity with respect to light emitted from said semiconductor light-emitting element and provided at said first region to completely cover said semiconductor light-emitting element; and

a second resin member having a second reflectivity greater than said first reflectivity with respect to the light emitted from said semiconductor light-emitting element and provided at said second region to surround said semiconductor light-emitting element; wherein

said first resin member includes a first top surface,

said second resin member includes a second top surface that is provided at a position where a distance from said main surface is greater than a distance from said main surface to said first top surface, and an inner wall that is provided on a side where said semiconductor light-emitting element is located and extends in a direction away from said main surface to reach said second top surface, and

said inner wall provides a reflecting surface for reflecting light emitted from said first top surface at the position where the distance from said main surface is greater than the distance from said main surface to said first top surface.

Claim 2 (Previously presented): The semiconductor light-emitting device according to claim 1, further comprising a metallic wire having one end connected to said semiconductor light-emitting element and another end connected to said main surface, and said first resin member is provided to completely cover said metallic wire.

Claim 3 (Previously presented): The semiconductor light-emitting device according to claim 2, wherein said one end is formed in a line shape, and said another end is formed in a ball shape.

Claim 4 (Previously presented): The semiconductor light-emitting device according to claim 2, wherein said one end is provided with a ball-shaped metal to sandwich said metallic wire between the ball-shaped metal and said semiconductor light-emitting element.

Claims 5-6 (Cancelled)

Claim 7 (Previously presented): A semiconductor light-emitting device comprising:

a lead frame having a main surface in which a first region and a second region extending along the periphery of said first region are defined;

a semiconductor light-emitting element provided at said first region;

a first resin member having a first reflectivity with respect to light emitted from said semiconductor light-emitting element and provided at said first region to completely cover said semiconductor light-emitting element; and

a second resin member having a second reflectivity greater than said first reflectivity with respect to the light emitted from said semiconductor light-emitting element and provided at said second region to surround said semiconductor light-emitting element, wherein

said first resin member includes a first top surface,

said second resin member includes a second top surface that is provided at a position where a distance from said main surface is greater than a distance from said main surface to said first top

surface, and an inner wall that is provided on a side where said semiconductor light-emitting element is located and extends in a direction away from said main surface to reach said second top surface, and

said lead frame includes terminal portions separated from each other by a slit-shaped groove, and said portions are formed thinner than the other portion of said lead frame.

Claim 8 (Previously presented): The semiconductor light-emitting device according to claim 1, wherein said lead frame is formed in a plate shape extending in one plane.

Claim 9 (Previously presented): The semiconductor light-emitting device according to claim 8, wherein said lead frame includes a first depression that is formed at an opposite surface with respect to said main surface and filled with a resin, and terminal portions to be electrically connected to a mounting board are provided on said opposite surface, on respective sides of said first depression.

Claim 10 (Previously presented): The semiconductor light-emitting device according to claim 1, wherein said lead frame includes a second depression formed at said first region, and said semiconductor light-emitting element is provided in said second depression.

Claim 11 (Previously presented): The semiconductor light-emitting device according to claim 1, wherein said lead frame is formed of a metal having a heat conductivity of not lower than 300 W/mK and not greater than 400 W/mK.

Claim 12 (Previously presented): The semiconductor light-emitting device according to claim 1, wherein said second resin member is formed such that an area of a shape defined by said inner wall in a plane parallel to said main surface increases with an increase of a distance from said main surface.

Claim 13 (Previously presented): The semiconductor light-emitting device according to claim 1, wherein a shape defined by said inner wall in a plane parallel to said main surface is one of circle, ellipse and polygon.

Claim 14 (Previously presented): A semiconductor light-emitting device comprising:

a lead frame having a main surface in which a first region and a second region extending along the periphery of said first region are defined;

a semiconductor light-emitting element provided at said first region;

a first resin member having a first reflectivity with respect to light emitted from said semiconductor light-emitting element and provided at said first region to completely cover said semiconductor light-emitting element; and

a second resin member having a second reflectivity greater than said first reflectivity with respect to the light emitted from said semiconductor light-emitting element and provided at said second region to surround said semiconductor light-emitting element, wherein

said first resin member includes a first top surface,

said second resin member includes a second top surface that is provided at a position where a distance from said main surface is greater than a distance from said main surface to said first top surface, and an inner wall that is provided on a side where said semiconductor light-emitting element is located and extends in a direction away from said main surface to reach said second top surface,

said lead frame includes a lead terminal projecting from the periphery of said main surface and extending in a prescribed direction, and said lead terminal has a tip end portion having an end surface formed at a tip end extending in said prescribed direction, and a base portion located between the periphery of said main surface and said tip end portion, and

said lead terminal is formed such that an area of said end surface is smaller than a cross sectional area of said base portion in a plane parallel to said end surface.

Claim 15 (Previously presented): The semiconductor light-emitting device according to claim 14, wherein said lead terminal has a first width at said base portion and a second width smaller than said first width at said tip end portion.

Claim 16 (Previously presented): The semiconductor light-emitting device according to claim 14, wherein said end surface corresponds to a cut surface formed by a prescribed cutting tool.

Claim 17 (Cancelled)

Claim 18 (Previously presented): An electronic image pickup device, comprising the semiconductor light-emitting device recited in claim 1.

Claim 19 (Previously presented): The electronic image pickup device according to claim 18, wherein when a reference plane of a rectangular shape is provided at a prescribed distance from said semiconductor light-emitting device, luminance at each corner of said reference plane irradiated with the light from said semiconductor light-emitting device is not less than 50% of luminance at the center of said reference plane.

Claim 20 (Previously presented): A semiconductor light-emitting device, comprising:

three lead frames spaced apart and extending in different directions from each other, each lead frame comprising

a main surface in which a first region and a second region extending along the periphery of said first region are defined;

a semiconductor light-emitting element provided at said first region;

a first resin member having a first reflectivity with respect to light emitted from said semiconductor light-emitting element and provided at said first region to completely cover said semiconductor light-emitting element;

a second resin member having a second reflectivity greater than said first reflectivity with respect to the light emitted from said semiconductor light-emitting element and provided at said second region to surround said semiconductor light-emitting element; wherein

said first resin member includes a first top surface,

said second resin member includes a second top surface that is provided at a position where a distance from said main surface is greater than a distance from said main surface to said first top surface, and an inner wall that is provided on a side where said semiconductor light-emitting element is located and extends in a direction away from said main surface to reach said second top surface, and

said light-emitting elements are for emitting light of a different color, each color selected from the group of red, blue, and green.

Claim 21 (Previously presented): The semiconductor light-emitting device according to claim 20, wherein areas of said main surfaces of said lead frames provided with said semiconductor light-emitting elements for emitting the light of blue and green, respectively, are each greater than an area of said main surface of said lead frame provided with said semiconductor light-emitting element emitting the light of red.

Claim 22 (Previously presented): The semiconductor light emitting device according to claim 1, wherein a surface of said inner wall is plated.